WHAT IS CLAIMED IS:

1. A method for formatting voice data comprising:

processing packet data received from a base transceiver station (BTS);

expanding the processed packet data using a fixed code rate rule; and

transmitting the expanded packet data with framing information to a mobile switching

center (MSC).

2. The method of claim 1, wherein a preamble and a message are integrated in the packet

data during the processing step.

3. The method of claim 1, wherein the fixed code rate rule repeatedly generates an

equivalent value for each bit of the processed packet data.

4. The method of claim 3, wherein the number of times the fixed code rate rule

repeatedly generates the equivalent value for each bit is pre-designated.

5. The method of claim 1, wherein the framing information is synchronous information.

6. The method of claim 5, wherein the framing information is comprised of a plurality

of bits, having values of 0 or 1, and is generated on a regular time basis.

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7. The method of claim 6, wherein a combination order of the plurality of bits is pre-designated.

8. The method of claim 1, wherein the framing information is inserted in the expanded packet data at regular intervals.

9. The method of claim 1, further comprising:

extracting the framing information within the expanded packet data received from the MSC, wherein the packet data is expanded by reproducing each bit value of the packet data and sequentially integrating the reproduced bit values with the corresponding original bit value;

restoring a size of the expanded packet data to an original size of the packet data;

processing the restored packet data; and

transmitting the restored and processed packet data to the BTS.

10. The method of claim 9, wherein restoring the size of the packet data to the original size comprises:

determining whether the expanded packet data contains the pre-designated number of bit value reproductions for each bit value of the packet data;

converting each bit of the expanded packet data to the value identified by a majority of an original bit value and the corresponding reproduced bit values; and

diminishing the size of the expanded packet data to the original size of the packet data by removing the reproduced bit values.

11. The method of claim 10, further comprising removing the pre-designated number of reproduced bit values corresponding to each of the original bit values, if the original bit value has the pre-designated number of corresponding reproduced bit values.

12. The method of claim 9, wherein processing the restored packet data is accomplished by deleting a preamble and a message integrated within the restored packet data.

13. A method for formatting voice data in a mobile telecommunication system, wherein the system has a first base station controller (BSC) that converts the voice data received from a first base transceiver station (BTS) into a fixed packet format and transmits the converted voice data to a mobile station controller (MSC); and a second BSC that converts the voice data received from the MSC into the fixed packet format and transmits the converted voice data to a second BTS, the method comprising:

expanding the voice data, from the first BTS, and pre-designated information using a fixed code rate rule at the first BSC;

inserting synchronous information into the expanded voice data at the first BSC;

transmitting the expanded voice data with the synchronous information to the MSC;

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extracting the synchronous information from the expanded voice data received from the MSC;

restoring the voice data by removing redundant information of the expanded voice data added by the fixed code rate rule expansion;

processing the restored voice data at the second BSC; and

transmitting the processed voice data to the second BTS.

14. The method of claim 13, wherein the fixed code rate rule repeatedly generates an equivalent value for each bit in the voice data, including the pre-designated information.

15. The method of claim 13, wherein the synchronous information is inserted into the expanded voice data at regular intervals.

16. The method of claim 13, further comprising:

judging whether each redundant value within the expanded voice data is changed after each corresponding bit of the voice data is expanded a pre-designated number of times according to the fixed code rate rule; and

converting each bit value of the expanded voice data to the value identified by a majority of an original bit value of the voice data and the corresponding redundant values generated according to the fixed code rate rule.

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17. The method of claim 13, wherein the synchronous information is comprised of a plurality of bits, having values of 0 or 1, whose combination order is pre-designated and generated on a regular time basis.

18. The method of claim 13, wherein a synchronization of data is decided based on a combination order of the extracted synchronous information.

19. A communication method, comprising:

encoding original information as encoded information, comprising the original information and redundant information, using a coding scheme;

generating transport information by overwriting portions of the encoded information with framing information;

transmitting the transport information to a receiver;

extracting the framing information from the transport information;

synchronizing the encoded information at the receiver using the extracted framing information; and

regenerating the original information by decoding the encoded information, wherein the redundant information of the encoded information is used to regenerate the original information lost due to transmission.

20. The communication method of claim 19, wherein the coding scheme is a fixed code rate rule scheme.

21. The communication method of claim 19, wherein the encoded information is overwritten with the framing information on a periodic basis.

22. A communication system, comprising:

an encoder that encodes original information as encoded information, having the original information and redundant information;

a framer that generates transport information by replacing portions of the encoded information with frame information;

a transmitter that transmits the transport information to a receiver, wherein

the redundant information of the encoded information is used to regenerate the original information lost during communication.

23. The communication system of claim 22, wherein the encoder encodes the original information using a fixed code rate rule scheme.

24. The communication system of claim 22, wherein the framer replaces the encoded information with the frame information on a periodic basis.

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25. The communication system of claim 22, wherein the original information is digitally represented voice information that is compressed, encoded, and packetized.

26. The communication system of claim 22, further comprising:

a frame information extraction unit that extracts the frame information from the transport information received by the receiver;

a synchronization unit that synchronizes the encoded information at the receiver using the extracted frame information obtained by the frame information extraction unit; and

a decoder that regenerates the original information by decoding the encoded information.